



SMT Gate Drive Transformer



- Designed for transformer coupled MOSFET and IGBT gate drive circuits; operating frequency: 50 kHz to 2 MHz.
- Requires only 56 mm² of board space.
- Specified by National Semiconductor on AN-1521 for their POE+PHYTEREV-I-E evaluation boards.
- Specified on the Microsemi PD70211EVB51F-12 evaluation board

Core material Ferrite

Terminations RoHS compliant tin-silver over tin over nickel over phosphor bronze

Weight 700 mg

Ambient temperature -40°C to +125°C

Storage temperature Component: -40°C to +125°C.

Tape and reel packaging: -40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Packaging 175/7" reel; 750/13" reel Plastic tape: 24 mm wide, 0.4 mm thick, 12 mm pocket spacing, 7.0 mm pocket depth

PCB washing Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf

Part number ¹	Turns ratio	Pri L ² min (μH)	Leakage L ³ max (μH)	DCR max (Ohms)		Isolation ⁴ (VDC / Vrms)	Volt-time product ⁵ (V-μsec)	SRF min ⁶ (MHz)	Capacitance Pri to Sec max (pF)
				Pri	Sec				
FA2659-AL_	1:1	296	1.5	0.795	0.655	2250 / 1591	34.2	1.39	21.9

1. When ordering, please specify **packaging** code:

FA2659-ALC

Packaging: **C** = 7" machine-ready reel. EIA-481 embossed plastic tape (175 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

D = 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (750 parts per full reel).

B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to C.

2. Inductance measured at 100 kHz, 0.1 Vrms, 0 Adc

3. Leakage inductance measured at 100 kHz, 0.1 Vrms with secondary pins shorted.

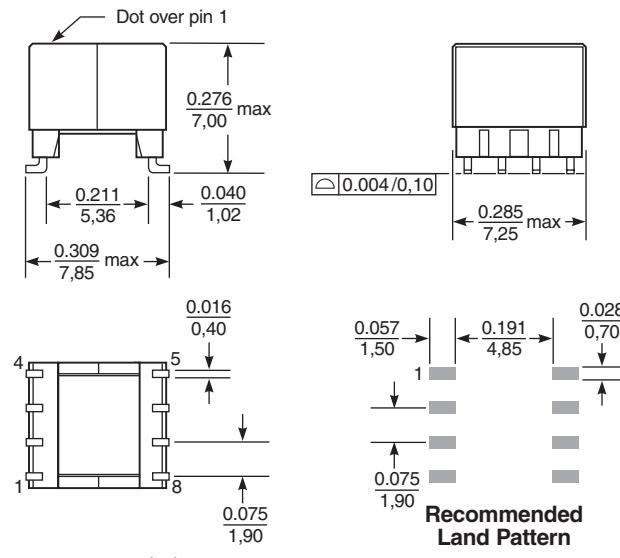
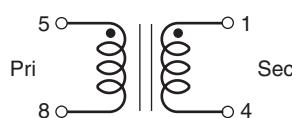
4. 2250 VDC / 1591 Vrms, one minute isolation (hipot) between primary and secondary.

5. Based on Bsat of the core at 25°C and number of turns of the primary.

6. SRF measured with coils connected in series using an Agilent/HP 4192 or equivalent.

7. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



Dimensions are in $\frac{\text{inches}}{\text{mm}}$